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ABSTRACT

Environmental Awareness is the theme of this bibliography compiled by the Friends Council on Education to assist in the task of implementing environmental awareness courses and experiences into the crowded curricula and extra-curricular life of schools and colleges. Part One, "Definition of the Problem," is a selected bibliography of printed material on the environmental crisis and what individuals, groups, or the academic community can do about it. Part Two, "Environmental Education," is an annotated bibliography with four sub-sections on (1) outdoor education, (2) conservation education, (3) nature education, and (4) environmental education--programs, courses of study, and lesson plans. Part Three, "Environmental Recreation," is an annotated bibliography of outdoor recreation literature including a number of references on canoeing, hiking, mountain climbing, cross-country skiing, backpacking, and other "outward bound" types of activities. This bibliography has been developed primarily to aid Friends schools and colleges in preparing for the Environmental Decade, one of renewed faith and practice based upon an ecological awareness of the total environment. (BL)

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INTRODUCTION

The Friends Council on Education's Environmental Awareness Bibliography has been compiled to assist you in the difficult task of implementing environmental awareness courses and experiences into the crowded curricula and extra-curricular life of your school or college.

Part One, "Definition of the Problem" is a selected bibliography of printed material on the environmental crisis and what you as an individual, group, or academic community can do about it.

Part Two, "Environmental Education," is an annotated bibliography with four sub-sections on (1) outdoor education; (2) conservation education; (3) nature education; and (4) environmental education--programs, courses of study and lesson plans.

Part Three, "Environmental Recreation," is an annotated bibliography of outdoor recreation literature including a number of references on canoeing, hiking, moutain climbing, cross-country skiing, backpacking and other "outward bound" types of activities.

It is my hope and prayer that some of the materials listed in the bibliography will help you prepare for the Environmental Decade--the decade of renewed faith and practice based upon an ecological awareness of the total environment.

Fred C. Swan
Consultant on
Environmental Awareness

SE 013 731

ENVIRONMENTAL AWARENESS IN FRIENDS SCHOOLS AND COLLEGES

Part One: Definition of the Problem: A Selected Bibliography of Printed Materials as of January 1971

THE ENVIRONMENTAL CRISIS
(Man's Struggle to Live with Himself)

1. Abrahamson, Dean E., Environmental Cost of Electric Power, Scientists' Institute for Public Information, New York, 1970, 36 pp. One in series of eight solid "workbooks" grappling at college level with specific problems. See also #7, 13, 18, 43, 45, 49.

2. Ambassador College Research Department, Our Polluted Planet, Ambassador College Press, Pasadena, California, 1968, 78 pp. Calculated by dramatic style and pictures to jar people awake to the problem.

3. American Association of University Women, A Resource Guide on Pollution Control: Federal, State, and Local Agencies and Organizations that Deal with Environmental Problems, the Association, Washington, D.C., 1970, 90 pp. One of the best such guides.

4. American Friends Service Committee, Man and the Economy: The Social Implications of Economic Patterns, the Community Relations Division of the AFSC, Philadelphia, 1970, 41 pp.

5. Barnett, John, editor, Our Mistreated World, Dow Jones Books, Princeton, New Jersey, 1970, 207 pp. A collection of comprehensive articles from the Wall Street Journal.

6. Barritt, Denis P., Right Sharing of Our World Resources, Friends World Committee for Consultation, Birmingham, England, 1968, 16 pp.

7. Berg, George G., Water Pollution, Scientists' Institute for Public Information, New York, 1970, 32 pp. See #1.

8. Boulding, Kenneth E., The Meaning of the 20th Century: The Great Transition, Harper Colophon Books, New York, 1965, 208 pp. Helps to reintroduce hope.

9. Bresler, Jack B., Human Ecology: Collected Readings, Addison-Wesley, Reading, Massachusetts, 1966, 472 pp. A global view; an exciting introduction to human ecology per se.

10. Brightbill, Charles K., The Challenge of Leisure, Prentice-Hall, Inc., Englewood Cliffs, N.J., 1960, 118 pp. A powerful invitation to live a total life within increasing leisure.

11. Bronner, Edwin B., editor, American Quakers Today, Friends World Committee, American Section and Fellowship Council, Philadelphia, 1967, 111 pp.

12. Carson, Rachel, Silent Spring, Houghton Mifflin, Cambridge, Mass., 1962, 368 pp.

13. Colorado Committee for Environmental Information and St. Louis Committee for Environmental Information, Nuclear Explosives in Peacetime, Scientists' Institute for Public Information, New York, 1970, 28 pp. See #1.

14. Comfort, Alex, The Nature of Human Nature, Avon Discus Books, New York, 1966, 255 pp. Useful even at middle school level.

15. Commoner, Barry, Science and Survival, The Viking Press, New York, 1967. 150 pp. A readable brief account by a leader and hero of the present movement.

16. Cross, David, and others, Community Action for a Better Environment, American Friends Service Committee, Philadelphia, 1970, 31 pp. mimeo.

17. Curtis, Richard, and Hogan, Elizabeth, Perils of the Peaceful Atom: The Myth of Safe Nuclear Power Plants, Ballantine Books, New York, 1970, 357 pp. A helpful counterpoise to optimism of the official presentation.

18. Dahlsten, Donald L., and others, Pesticides. Scientists' Institute for Public Information, New York, 1970, 24 pp. See #1.

19. Dasmann, Raymond F., A Different Kind of Country. Collier Books, New York, 1970, 276 pp. Good reading; emphasizes need for diversity; written by the head of the Conservation Foundation.

20. Dasmann, Raymond F., Environmental Conservation, John Wiley and Sons, Inc., New York, 1968, 375 pp. Originally a college text, now hailed as an excellent field guide to various environments, with strong section on the city.

21. Davies, J. Clarence III, The Politics of Pollution, Pegasus, New York, 1970, 231 pp. Concentrates on the federal level.

22. DeBell, Garrett, editor, The Environmental Handbook: Prepared for the National Environmental Teach-In, Ballantine Books, New York, 1970, 367 pp.

23. DeBell, Garrett, editor, The Voter's Guide to Environmental Politics: Before, During, and After the Election, Ballantine Books, New York, 1970, 305 pp. Much more than a tabulation of who voted for what; it gives protocol for visits to Congressmen and for lobbying; states issues succinctly; a sophisticated handbook for upper level students.

24. Dubos, Rene, So Human An Animal, Charles Scribner's Sons, New York, 1968, 267 pp. A prize-winning, philosophical discussion by a nationally acknowledged scientist.

25. Ehrlich, Paul R., The Population Bomb, Ballantine Books, New York, 1970, 223 pp.

26. Environmental Action National Staff, Earth Day--The Beginning: A Guide for Survival, Bantam Books, New York, 1970, 233 pp. An anthology of speeches nation-wide on Earth Day, emphasizing the task for decade ahead.

27. The Editors of Fortune, The Environment: A National Mission for the Seventies, Perennial, Harper and Row, New York, 1970, 220 pp. The last chapter, "How to Think about the Environment," is especially important. It points to the use of computers in problem solving.

28. Fuller, R. Buckminster, Operating Manual for Spaceship Earth, Pocket Books, New York, 1970, 127 pp. A bold blueprint for survival based upon diagnosis of the causes of the environmental crisis.

29. Goldstein, Jerome, Garbage As You Like It: A Plan to Stop Pollution by Using Our Nation's Wastes, Rodale Books, Inc., Emmaus, Pa., 1969, 243 pp.

30. Hall, Edward T., The Hidden Dimension, Anchor Books, New York, 1969, 217 pp. A powerful book on human responses to crowding. See #35 as well.

31. Hamm, Russell L., and Nason, Larry, An Ecological Approach to Conservation, Burgess Publishing Co., Minneapolis, 1964, 366 pp.

32. Heath, Douglas, Why A Friends School? Pendle Hill Pamphlet 164, Sowers Printing Company, Lebanon, Penna., 1969, 48 pp.

33. Helfrich, Harold W., editor, The Environmental Crisis: Man's Struggle to Live with Himself, Yale University Press, New Haven, 1970, 187 pp. An anthology of work by top men.

34. Hollingshead, A. B., "Human Ecology" in Principles of Sociology, pp. 67-118, edited by Alfred McClung Lee, The College Outline Series, Barnes and Noble, Inc., New York, 1955. An excellent discussion of Ecology as a scientific discipline.

35. Jackins, Harvey, The Human Side of Human Beings, Rational Island Publishers, Seattle, 1965, 102 pp. Sees individuals as centers of environmental awareness; an approach to reevaluative counseling. Adds another dimension to Hall, #30.

36. Kirk, Thomas, Bibliography of Environment Bibliographies, Earlham College, Richmond, Indiana, 1970, 2 pp. mimeo.

37. Kormondy, Edward J., Concepts of Ecology, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1969, 209 pp. A solid introductory textbook in the series Concepts of Modern Biology.

38. Laycock, George, The Diligent Destroyers: A Critical Look at the Industries that are Permanently Defacing the Landscape, Doubleday and Co., Inc., New York, 1970, 225 pp.

39. Lorenz, Konrad, On Aggression, Bantam Books, New York, 1970, 306 pp. A revolutionary study of the killer instinct in animals and men.

40. Mallery, David, Toward a More Human School, National Association of Independent Schools, Boston, 1970, 45 pp. The school as environment.

41. Marine, Gene, America the Raped: The Engineering Mentality and the Devastation of a Continent, Avon Discus Books, New York, 1969, 331 pp.

42. Marx, Wesley, The Frail Ocean, Ballantine Books, New York, 1967, 274 pp.

43. McClintock, Michael, and others, Environmental Effects of Weapons Technology, Scientists' Institute for Public Information, New York, 1970, 32 pp. See #1.

44. McLuhan, Marshall, Understanding Media: The Extensions of Man, Signet Books, New York, 1964, 311 pp. A study of the expansion of the avenues of man's awareness.

45. Mead, Margaret, Hunger, Scientists' Institute for Public Information, New York, 1970, 32 pp. See #1.

46. Mitchell, John G., and Stalling, Constance L., editors, Ecotactics: The Sierra Club Handbook for Environmental Activists, Pocket Books, New York, 1970, 288 pp. More helpful than The Environmental Handbook.

47. Montagu, Ashley, Man: His First Million Years, Mentor Books, New York, 1961, 192 pp.

48. Mumford, Lewis, The City in History: Its Origins, Its Transformations, and Its Prospects, Harcourt, Brace, and World, Inc., New York, 1961, 657 pp. Helps the layman appreciate the city.

49. Nadler, Allen A., and others, Air Pollution, Scientists' Institute for Public Information, New York, 1970, 28 pp.

50. National Audubon Society, Directory of Environmental Education Facilities, the Society's Nature Center Planning Division, New York, 1969, 40 pp.

51. National Education Association, Man and His Environment: An Introduction to Using Environmental Study Areas, N.E.A., Washington, D.C., 1970, 56 pp. Highly recommended for elementary and middle schools; has a fine section on films.

52. National Geographic Society, "Our Ecological Crisis," National Geographic, December, 1970. Three articles and maps; a very good summary definition of the problem.

53. National Wildlife Federation, Conservation Directory 1969, N.W.F., Washington, D.C., 1969, 146 pp. A good companion to #3.

54. Nicholson, Max, The Environmental Revolution: A Guide for the New Masters of the World, McGraw-Hill, New York, 1970, 366 pp. The best book on applied ecology in this list; a must for college and secondary school; tough, well-illustrated.

55. Odum, Eugene P., Fundamentals of Ecology, W. B. Sanders Company, Philadelphia, Pa. 1953, 384 pp. By the granddaddy of them all. Tops.

56. Osborn, Fairfield, Our Plundered Planet, Pyramid Books, New York, 1970, 176 pp.

57. Packard, Vance, The Waste Makers, A Pocket Cardinal Edition, New York, 1968, 306 pp.

58. Pendleton, Don, 1989: Population Doomsday, Bee-Line Books, New York, 1970, 192 pp. Fiction; refreshing and realistic companion to The Population Bomb.

59. The President's Council on Recreation and Natural Beauty, From Sea to Shining Sea: A Report on the American Environment--Our Natural Heritage, U.S. Government Printing Office, Washington, D.C., 1968, 304 pp. Good picture coverage and section on "Keys to Action."

60. Editors of Ramparts, Eco-Catastrophe, Canfield Press, San Francisco, 1970, 150 pp. Polemic.

61. Revelle, Roger, and Landsberg, Hans H., editors, America's Changing Environment, Beacon Press, Boston, 1970, 314 pp. Anthology; especially good chapter on "Ecology as an Ethical Science."

62. Rienow, Robert and Leona Train, Moment in the Sun: A Report on the Deteriorating Quality of the American Environment, Ballantine Books, New York, 1970, 395 pp.

63. Rockefeller, Nelson, Our Environment Can Be Saved, Doubleday and Co., New York, 1970, 176 pp.

64. Saltonstall, Richard, Jr., Your Environment and What You Can Do About It: A Citizen's Guide, Walker and Co., New York, 1970, 299 pp. Good companion to #3, by a solid journalist. One of best books on applied ecology. See: #23, 46, 74.

65. Schwartz, William, editor, Voices for the Wilderness, Ballantine Books, New York, 1969, 366 pp. Key papers from Sierra Club Wilderness Conferences.

66. Scientific American, Inc., "The Biosphere," Scientific American, September 1970.

67. Shapiro, Bettison E., editor, Natural Science for Youth: 1970-71 Directory of Environmental Science Centers in U.S. and Canada, The Foundation, New Haven, Connecticut, 1970, 131 pp. A must for all libraries as key to resources available to individual schools.

68. Shepard, Paul, and McKinley, editors, The Subversive Science: Essays Toward an Ecology of Man, Houghton Mifflin Co., Boston, 1969, 453 pp.

69. Shurcliff, William A., SST and Sonic Boom Handbook, Ballantine Books, New York, 1970, 153 pp. A good introduction to this environmental concern.

70. Smithsonian Institution, The Fitness of Man's Environment, Harper and Row, Publishers, Inc., New York, 1968, 250 pp. An anthology from top flight men.

71. Snyder, Ellie, compiler, Environmental Education for Everyone: Bibliography of Curriculum Materials for Environmental Studies March, 1970, National Education Association, Washington, D.C., 1970, 38 pp.

72. Stapp, William B., "Environmental Encounters," Environmental Education, 2:35-41, Fall, 1970. A Strategy for Curriculum Development and Implementation (K-12) by an outstanding professor at the University of Michigan.

73. Stewart, George R., Not So Rich as You Think, Signet, New York, 1970, 171 pp. An examination of real costs of pollution and of recycling for high school and junior high level.

74. Swatex, Paul, The User's Guide to the Protection of the Environment, Ballantine Books, New York, 1970, 312 pp. Parallel to #63; helps bridge gap between parents and students on what can be done about pollution in their own homes and local areas.

75. Storer, John H., The Web of Life: A First Book of Ecology, Signet Science Library, New York, 1956, 128 pp.

76. Storer, John H., Man in the Web of Life, Signet Science Library, New York, 1968, 160 pp.

77. Task Force on Environmental Education and Youth Activities, Readings for the Eco-Activist: A Bibliography of Selected Environmental Publications of the Executive Branch of the Federal Government, Office of the Secretary of Interior, Washington, D.C., 1970, 33 pp.

78. Thomas, William L., Jr., and others, Man's Role in Changing the Face of the Earth, The University of Chicago Press, Chicago, 1956, 1193 pp. An older but solid reference book that helps make one aware of the need for a world view of our human and natural resource problems.

79. Train, Russell E., chairman, Environmental Quality: The First Annual Report of the Council on Environmental Quality, U.S. Government Printing Office, Washington, D.C., 1970, 326 pp. Excellent and cheap; the best summary of the situation as seen from the federal level.

80. Udall, Stewart L., The Quiet Crisis, Avon Discus Books, New York, 1963, 224 pp.

81. United States Government Organization Manual--1970/71, U.S. Government Printing Office, Washington, D.C., July 1970, 820 pp. Companion to all the other resource guides.

82. U.S. Department of Health, Education and Welfare, Proceedings of Symposium on Human Ecology, Airlie House, Warrenton, Va., November 24-27, 1968, 123 pp.

83. White, Gilbert F., AFSC chairman, Who Shall Live? Man's Control over Birth and Death--A Report Prepared for the American Friends Service Committee, Hill and Wang, Inc., 1970, 144 pp.

Prepared for the Friends Council on Education by Fred C. Swan as a part of his responsibilities as Consultant on Environmental Awareness.

Additional copies of Bibliography are available from:

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ENVIRONMENTAL AWARENESS IN FRIENDS SCHOOLS AND COLLEGES

Part Two: A Selected Bibliography of Environmental Education Literature

OUTDOOR EDUCATION
(Man's Use of the Outdoors as a Classroom)

1. Brehm, Shirley A., A Teacher's Handbook for Study Outside the Classroom, Charles E. Merril Publishing Company, Columbus, Ohio, 1969, 100 pp. Elementary teachers will find this handbook very helpful in developing plans for study outside the classroom, and for following up those field trips with meaningful work back in the classroom. Contains an excellent section on how to set up a file of local places to visit for science, social studies, fine arts, mathematics, language arts, health, physical education, and recreation. For those who suffer from field trip planning headaches this book may bring real relief.

2. Carlson, Reynold E., and others, Outdoor Education, Prentice-Hall, Inc., Englewood Cliffs, N.J., 1963, 322 pp. School heads and teachers at all levels will find this a useful guide for initiating outdoor education in the school curriculum (K-16). The interdisciplinary approach makes it a valuable textbook for both pre-service and in-service training for teachers and outdoor leaders.

3. Freeberg, William H., and Taylor, Loren E., Philosophy of Outdoor Education, Burgess Publishing Company, Minneapolis, 1961, 445 pp. This textbook goes a long way in clarifying the real meaning and significance of outdoor education in the school curriculum. School trustees, heads, teachers, and parents not familiar with outdoor education will find this enlightening even though it's ten years old.

4. Freeberg, William H., and Taylor, Loren E., Programs in Outdoor Education, Burgess Publishing Company, Minneapolis, 1963, 457 pp. This book is a useful curriculum guide for outdoor education as a method of teaching and as a method of learning. It gives an excellent overview of benefits of the following types of outdoor education programs: the school journeys, the school garden, the school farm, the school forest, the school camp, school sanctuaries and outdoor classrooms. The book also suggests ways and means of enriching the following subject-matter areas through outdoor education: social studies, communications, mathematics, science, health, physical education, and performing arts.

5. Hammerman, Donald R., and Hammerman, William M., Teaching in the Outdoors, Burgess Publishing Company, Minneapolis, 1964, 120 pp. An excellent introduction to teaching in the outdoors. This book gives the rationale underlying outdoor education; the relationship of learning in the out-of-doors to the school curriculum; effective techniques and procedures for outdoor teaching; suggestions on organizing, implementing and evaluating resident outdoor school programs; and the implications of outdoor education for teacher education.

6. Hammerman, Donald R., and Hammerman, William M., compilers, Outdoor Education: A Book of Readings, Burgess Publishing Company, Minneapolis, 1968, 401 pp. This anthology should serve to stimulate the imaginations of our Friends Schools and Colleges in initiating and developing outdoor education programs appropriate to the needs of their respective academic communities. The outdoor education literature is clustered under the following chapter headings: (1) outdoor education: an emerging educational philosophy; (2) historical perspective: the outdoor laboratory; (3) what and how; (4) programs and practices: diversity in education; (5) teacher education out-of-doors; and (6) evaluation and research.

7. Hug, John W., and Wilson, Phyllis J., Curriculum Enrichment Outdoors, Harper and Row, New York, 1965, 214 pp. An outstanding feature of this fine book is its activities listing according to grade level for the following grades: primary level (grades 1-3); intermediate level (grades 4-6); and junior high level (grades 7-9). Unfortunately no activities were listed specifically for the secondary and college level (grades 10-16); however, students at these levels will find it a useful reference in working with children in the lower grades.

8. MacMillan, Dorothy Lou, School Camping and Outdoor Education, Wm. C. Brown Company, Dubuque, Iowa, 1956, 160 pp. A valuable guide for schools and colleges planning and administering a school camp and outdoor education programs.

9. Mand, Charles L., Outdoor Education, J. Lowell Pratt and Company, New York, 1967, 180 pp. This text is intended for elementary school teachers and contains pretty much the same information as the other books in this list on outdoor education.

10. Schramm, Wilbur, Classroom Out-of-Doors: Education through School Camping, Sequoia Press, Kalamazoo, Michigan, 1969, 193 pp. This is the story of the 24-year-old San Diego City-County school camping program for sixth grade boys and girls.

11. Smith, Julian W., Outdoor Education for American Youth, American Association for Health, Physical Education, and Recreation, Washington, D.C., 1957, 150 pp. The thesis of this book is that secondary schools have a vital responsibility for equipping every boy and girl with attitudes, knowledge, skills, and appreciations which are so essential for lifelong enjoyment of the out-of-doors. The book is divided into four sections: (1) The setting and need for outdoor education; (2) Outdoor education in the high school program; (3) Facilities and resources for outdoor education; and (4) The lack of teacher preparation in outdoor education.

12. Smith, Julian W., Outdoor Education, American Association for Health, Physical Education and Recreation, Washington, D.C., revised edition 1970, 32 pp. An excellent introduction to outdoor education as an approach to better learning prepared by one of outdoor education's most dedicated spokesmen and educators.

CONSERVATION EDUCATION
(Man's Use and Misuse of the Environment)

1. Bale, Robert O., Conservation for Camp and Classroom, Burgess Publishing Company, Minneapolis, 1962, 145 pp. An excellent guide to meaningful conservation activities, demonstrations, and experiments for elementary and junior high teachers. Activities are grouped by soil-centered, wildlife-centered, forest-centered, and interrelationships-centered.

2. Bennett, Mrs. Eleanor B., and others, School Site Development for Conservation and Outdoor Education, Penna. Dept. of Public Instruction, Harrisburg, 1969, 15 pp. Gives a checklist of educational environments for school-controlled properties. Outlines desirable steps for developing an outdoor laboratory and makes suggestions on the use of an outdoor laboratory effectively year round, grades K-12.

3. Brainerd, John W., Natural Areas as School Conservation Education Aids, Springfield College, Springfield, Massachusetts, n.d., 6 pp. mimeo. The author makes a strong case for the use of natural areas by schools to achieve higher levels of ecological understanding of our natural resources.

4. Brennan, Mathew J., editor, People and Their Environments: Teachers' Curriculum Guides to Conservation Education, J. G. Ferguson Publishing Co., Chicago, 1969. Eight volumes.

   "People and Their Environment" is a series of eight curriculum guides designed to help teachers develop a program of conservation education as an integral part of a school's existing curriculum.

   Written by teachers for teachers, these guides were developed as the South Carolina Conservation Curriculum Improvement Project. They have been used experimentally in classrooms throughout the United States and reviewed by Departments of Education in all 50 states and by curriculum committees in several foreign countries.

   They offer a unique program of action - a series of curriculum experiences relating to all areas of conservation: natural resources, human resources, sociological resources, and economic resources. They apply to various areas and cover all levels of education from grade one through twelve.

   The eight volumes are as follows: (1) Grades 1-3; (2) Grades 4-6; (3) Science, Grades 7-9; (4) Social Studies, Grades 7-9; (5) Social Studies, Grades 10-12; (6) Biology; (7) Home Economics, Grades 9-12; (8) Outdoor Laboratory, Grades 1-12. ($4.25 per volume or $27.20 postpaid for the eight volume set from J. G. Ferguson Publishing Company, 6 North Michigar Avenue, Chicago, Illinois 60602)

5. Brown, Robert E., and Mouser, G. W., Techniques of Teaching Conservation Education, Burgess Publishing Company, Minneapolis, 1965, 112 pp. A good guide for high school teaching on soil, water, forests, and wildlife conservation. Gives tips on types of field experiences and how to prepare for them.

6. Boehm, Charles H., and others, Pennsylvania Teaching Guide: To Natural Resources Conservation (Curriculum Services Series No. 7), Pennsylvania Dept. of Public Instruction, Harrisburg, 1964, 110 pp. An excellent example of the natural resource approach to conservation. A good companion to Bennett's booklet #2. Friends Schools and Colleges in other states should check out the conservation education publications of their own State's Department of Public Instruction.

7. Carvajal, John and Munzer, Martha E., Conservation Education: A Selected Bibliography, The Interstate Printers and Publishers, Inc., Danville, Ill., 1968, 98 pp. Published by the Conservation Education Association, this book belongs in every K-16 environmental education curriculum designer's library.

8. Dasmann, Raymond F., Environmental Conservation, John Wiley and Sons, Inc., New York, 1968, 375 pp. Takes a global view of environmental problems. Deals with the difficult question of the spiritual needs and the aesthetic needs that only a healthy environment can supply us. Unlike many early conservation textbooks this one deals with the consequences of overpopulation, of urbanization and the urban environment. Teachers and upper division high school and lower division college students will find this book enlightening.

9. Fox, Charles E., Conservation Activities for Young People, Forest Service, U.S. Department of Agriculture, Washington, D.C., 1964, 20 pp. A helpful guide for teaching forest conservation.

10. Forest Service, Forestry Activities: PA-457, U.S. Department of Agriculture, Washington, D.C., 1963, 31 pp. Like #9 this is also a helpful guide for giving students first hand experience in forest conservation.

11. Forest Service, Teaching Conservation through Outdoor Education Areas - PA 837, U.S. Department of Agriculture, Washington, D.C., 1968, 23 pp. This booklet gives many valuable suggestions on how National Forests can be used to teach the total environment - the total relationship between man and the world around him.

12. Hamm, Russell L., and Nason, Larry, An Ecological Approach to Conservation, Burgess Publishing Company, Minneapolis, 1964, 366 pp. Does an excellent job of relating conservation and ecology. Of particular value is the designation of materials, activities, literature, and audio-visual aids for various grade levels - elementary, secondary, and college.

13. Iowa Conservation Education Council, Conservation Source Book, Iowa State University Press, Ames, Iowa, 1962, 88 pp. Like the Pennsylvania Conservation Teaching Guide, #6, this source book and its updated version should be very helpful to Scattergood School and William Penn College environmental educators.

14. The Izaak Walton League of America; Conservation Education Association; and the Nature Center Division of the National Audubon Society, Guidelines to Conservation Action, The Izaak Walton League of America, Glenview, Illinois, 1966, 132 pp. While this guidebook is aimed primarily at certain conservation groups, teachers and students in our Friends Schools will find it a useful introduction to the grassroots of the American Conservation Movement.

15. Michaud, Howard H., and Whitaker, Prevo L., Conservation Teaching Tips, Department of Forestry, Purdue University, Lafayette, Indiana, 1955, 23 pp. This booklet was sponsored by the National Association of Biology Teachers, the Indiana Department of Conservation, and the National Wildlife Federation. It contains conservation teaching tips, ideas and schemes suggested by teachers as aids to teaching conservation.

16. Michaud, Howard H., Teaching Conservation in Indiana Schools (Bulletin No. 232), Indiana Department of Public Instruction, Indianapolis, 1959, 50 pp. Contains excellent material on human conservation and scenic and recreation conservation in addition to good coverage of the traditional areas of soil, water, mineral, plant and wildlife conservation.

17. Sawyer, Luella K., editor, How to Teach Wilderness Conservation, The Sierra Club - San Francisco Bay Chapter, 1968, 32 pp. This teaching unit prepared by the San Francisco Chapter of the Sierra Club approaches wilderness preservation as one of several important reasons for having parks. The topics, concepts, suggested activities, sources of films, publications, and agencies to contact make this a very valuable teaching aid for teachers, grades K-16.

18. Schneider, Gerald, "Conservation Teaching in the City," (L-174), The N.Y. State Conservationist, August-September 1968, 6 pp. Here is an urbanite's view on how to reach urbanites with a natural resource story.

19. Shomon, Joseph J., Manual of Outdoor Conservation Education, National Audubon Society, New York, 1964, 96 pp. An excellent guide to teachers on how they can do a better teaching job using the outdoor environment as a classroom.

20. Stapp, William B., Integrating Conservation and Outdoor Education into the Curriculum, Burgess Publishing Company, 1965, 93 pp. Gives the details on how Dr. Stapp developed a conservation program for the Ann Arbor Public School System and integrated this program into their existing curriculum, K-12.

21. U.S. Department of Agriculture, Conservation Tools for Educators: Putting Conservation to Work, Forest Service, Pacific Northwest Region, Portland, Oregon, 1968, 76 pp. An excellent manual designed to help integrate conservation education into the curriculum, grades 1-12. Our Friends Schools and Colleges in the Pacific Northwest and British Columbia will probably find the greatest use for this book.

22. U.S. Department of Interior, Conservation Yearbooks, Washington, D.C., 1965-1969. Five yearbooks.

    1965 - Quest for Quality is a full-color outline of the challenges presented by a rapidly growing America. Urges us to look at our handling of natural resources with a view to tomorrow's demands and needs. Of exceptional interest to all conservationists, students, teachers, and naturalists.

    1966 - The Population Challenge is about our expanding population and how it has abused the nation's resources, often turning beautiful areas into wastelands. Describes steps necessary to preserve our way of life.

    1967 - The Third Wave is a report to the growing millions concerned with preserving the quality of the nation's air, water, land, minerals, recreation, and fish and wildlife. The title is based on the historic third phase of conservation - the ecological approach. (See #12, Hamm and Nason, An Ecological Approach to Conservation)

    1968 - Man...An Endangered Species describes how man through unbridled technology and population pressures has made himself a threatened species. Report is excellent for classroom and discussion groups.

    1969 - It's Your World tells of the new grassroots movement in the U.S. in which people, individually and in groups, have taken positive action in improving their environment. Many full-color pictures and examples of successful projects make this an excellent discussion and teaching aid.

23. U.S. Soil Conservation Service, An Outline for Teaching Conservation in Elementary Schools, U.S. Department of Agriculture, Washington, D.C., 1962, 14 pp. This booklet describes how to integrate conservation into the elementary school curriculum.

24. U.S. Soil Conservation Service, An Outline for Teaching Conservation in High Schools, U.S. Department of Agriculture, Washington, D.C., 1962, 21 pp. This booklet describes how conservation education can be incorporated into existing high school physical, biological, and social science courses. It outlines objectives of conservation education, topics for study, and suggested activities.

25. Weaver, Richard L., editor, Manual for Outdoor Laboratories, Interstate Printers and Publishers, Inc., n.d., 81 pp. A compilation of articles by the National Association of Biology Teachers intended to promote the development and use of school grounds as outdoor laboratories. It contains descriptions of ways to establish them, features to emphasize and uses to make of the areas. Practical suggestions include school gardens, weather stations, outdoor theaters, and winter field experiences for biology teachers. (High School Level)

NATURE EDUCATION
(Natural History and Ecology)

1. The Association of Interpretive Naturalists, Inc., Preparation of the Interpretive Naturalist, Columbus, Ohio, 1969, 10 pp. One of the best statements available on the training and experience necessary for one to become an interpretive naturalist.

2. The Association of Interpretive Naturalists, Inc., Selected Sources of Information for Interpretive Naturalists, Columbus, Ohio, 1969, 48 pp. An annotated bibliography of readily available information related to the activities of interpretive naturalists.

3. Atwood, Wallace W., The Physiographic Provinces of North America, Ginn and Company, New York, 1940, 536 pp. One of several texts used by the consultant in developing an awareness to the physiographic setting of our North American Friends Schools and Colleges.

4. Austing, G. Ronald, The World of the Red-Tailed Hawk, J. B. Lippincott Company, Philadelphia, 1964, 128 pp. Superb photographs and description of the life style of one bird of prey that can be seen near most of our North American School Campuses.

5. Bascom, Willard, Waves and Beaches- The Dynamics of the Ocean Surface (Anchor Science Study Series), Doubleday and Co., New York, 1964, 267 pp. A classic on marine erosion and wave anatomy.

6. Bates, Barbara, The Real Book about Pets, Garden City Books, New York, 1952, 192 pp. Tells how to choose, care for, feed and train all kinds of pets, large and small, indoors or out.

7. Brooks, Maurice, The Appalachians, Houghton Mifflin Company, Cambridge, Mass., 1965, 346 pp. A Naturalist's America Series Book.

8. Broun, Maurice, Hawks Aloft, Kutztown Pub. Co., Kutztown, Penna., 1960, 222 pp. (Now in paperback) The story of Hawk Mountain, Pennsylvania, with calendar chart of hawk flights. One of the most dramatic achievements in wildlife protection.

9. Brown, Vinson, The Amateur Naturalists Handbook, Little, Brown and Company, Boston, 1948, 475 pp. Divided into four sections: (1) the beginning naturalist; (2) the student naturalist; (3) the advanced naturalist; (4) becoming an explorer naturalist.

   Five other books by the same author contain many activities and techniques not found in "modern" biology texts. These are How to Make a Home Nature Museum, How to Make a Miniature Zoo, How to Explore the Secret Worlds of Nature, How to Understand Animal Talk, and Reading the Woods.

10. Burnett, R. Will; Fisher, Harvey I., and Zim, Herbert S., Zoology, Golden Press, 1958, 160 pp. An introduction to the animal kingdom from Golden Nature Guide series, which are in many of our elementary school classrooms.

11. Burt, William Henry, and Grossenheider, Richard Philip, A Field Guide to the Mammals, Houghton Mifflin Company, Boston, 1956, 200 pp. Gives field marks of all North American Mammals found north of the Mexican Boundary. A Peterson Field Guide Series Guide.

12. Canadian Nature Magazine, Nature Activities: The Source Guide for Teachers, Toronto, 1947, 63 pp. According to this early guide "there must be fun, lightness, and fellowship in the teaching of nature or it becomes as dry as a bug on a pin."

13. Carson, Rachel L., The Edge of the Sea, Signet Science Library, New York, 1955, 238 pp. The Atlantic Coast of North America furnishes the author with three of the world's typical tidal environments: the rocky shore, the rim of sand, and the coral coast. An excellent introduction to the seashore world for our eastern schools and colleges.

14. Carson, Rachel L., The Sea Arourd Us, Mentor, New York, 1960, 175 pp. A classic which does much to stimulate environmental awareness and an appreciation of the sea.

15. Clancy, Edward P., The Tides Pulse of the Earth, Anchor Science Study Series, Doubleday and Co., New York, 1969, 228 pp. A good companion for #5, 13, and 14.

16. Comstock, Anna Botsford, Handbook of Nature Study, Comstock Publishing Associates, Ithaca, New York, 1961, 937 pp. A classic work on nature, this well-illustrated book contains information on the teaching of nature study and such subjects as birds, fishes, reptiles, amphibians, mammals, insects, plants, water, soil, stars, magnetism, the weather and much more. The bibliography may be useful to locate early nature writings.

17. Connant, Roger, A Field Guide to Reptiles and Amphibians of the United States and Canada East of the 100th Meridian (The Peterson Field Guide Series), Houghton Mifflin Company, Boston, 1958, 366 pp. An excellent field guide for herpetologists in our eastern Friends Schools and Colleges. Friends Schools and Colleges west of the 100th meridian should use Robert C. Stebbins's Amphibians and Reptiles of Western North America (McGraw-Hill Book Co., Inc., 1954).

18. Dunn, L. C. and Dobzhansky, Th., Heredity, Race and Society, Mentor, New York, 1958, 144 pp. A classic scientific explanation of human differences.

19. Dwight, Edward H., cataloguer, Audubon Watercolors and Drawings. Munson-Williams-Proctor Institute and The Pierpont Morgan Library, New York, 1965, 57+ pp. But one sampling of one of America's early artist-naturalist's contributions to environmental awareness.

20. Eifert, Virginia S., Land of the Snowshoe Hare, Dodd, Mead and Company, New York, 1960, 271 pp. This book is based on Eifert's wide exploration of the wild country along the Canadian border of the Midwest. It is a perceptive guide to tell the story of the seasons in this country of long winters and short summers.

21. Farb, Peter, Face of North America: The Natural History of a Continent, Harper and Row, New York, 1963, 316 pp. Does an excellent job in giving one a feeling for the total natural environment of North America. This book was a constant companion on the consultant's visitation of North American Friends Schools and Colleges during the summer of 1970.

22. Faris, John T., Seeing Pennsylvania, J. B. Lippincott Company, 1919, 350 pp. For students interested in following the trails of history and man's impact on the face of Pennsylvania. Retracing some of these routes would give one a feeling for the changes that have taken place since 1919.

23. Fish and Wildlife Service, Migration of Birds, (Circular 16), U.S. Government Printing Office, Washington, D.C., 1950, 102 pp. An excellent monograph. Should be of interest to our Friends Schools and Colleges along the Atlantic flyway, the Mississippi flyway, the central flyway, and the Pacific flyway.

24. Fisher, James, and Peterson, Roger Tory, Wild America, Houghton Mifflin Company, Boston, 1956, 434 pp. The record of a 30,000-mile journey around the continent by Peterson and Fisher. Another example of nature education possible through travel and keen observation along the way.

25. Gardner, John F., A Book of Nature Activities, Interstate, Danville, Illinois, 1967, 40 pp. Spring, Summer, Fall, and Winter nature activities for elementary school age children.

26. Gibbons, Euell, Stalking the Wild Asparagus, David McKay Company, Inc., New York, 1970, 303 pp. This field book on the gathering and eating of wild foods provides an exciting "new" approach to nature study and nature appreciation. Two other books by Gibbons should also be helpful to Quaker outdoor educators- Stalking the Healthful Herbs and Stalking the Blue-Eyed Scallop.

27. Glasier, Phillip, As the Falcon Her Bells, E. P. Dutton and Co., Inc., New York, 1963, 223 pp. One of the British Isles last professional falconers shares his knowledge of this ancient sport.

28. Goldstein, Jerome, and Goldman, M. C., editors, Guide to Organic Food Shopping and Environmental Living, Rodale Press, Emmaus, Penna., 1970, 116 pp. Full of useful organic living tips plus containing a directory of ecology action groups and a directory of organic food sources.

29. Grove, H. Jesse, Interpretation in the National Wildlife Refuge System, U.S. Dept. of Interior, Bureau of Sport Fisheries and Wildlife, Division of Wildlife Refuges, Branch of Public Use, Washington, D.C., 1970, 23 pp. mimeo. A paper presented at the Interpretive Naturalists last spring in Hershey, Penna., describing the efforts being made to improve outdoor education programs in National wildlife refuges.

30. Headstrom, Richard, Birds' Nests: A Field Guide, Ives Washburn, Inc., New York, 1961, 128 pp. An identification manual to the nests of birds of the United States east of the one hundredth meridian. Same author has a guide to western nests. An excellent guide for winter use in identifying birds' nests.

31. Henley, Diana, ASPCA Guide to Pet Care, Taplinger Publishing Co., Inc., New York, 1970, 70 pp. An excellent guide to pet care by the head of education for the American Society for the Prevention of Cruelty to Animals.

32. Hillcourt, William, Field Book of Nature Activities and Conservation, G. P. Putnam's Sons, New York, 1961, 432 pp. Describes hundreds of nature and conservation projects dealing with various topics. Includes a project check list for group work and many references.

33. Holland, W. J., The Butterfly Book, Doubleday and McClure Co., 1898, 382 pp. A classic.

34. Hylander, Clarence J., Wildlife Communities: From Tundra to Tropics in North America, Houghton Mifflin Company, Boston, 1966, 342 pp. Diagrams, maps, and photographs make this a valuable contribution to an awareness of North America's natural environments. (It gives added depth to one aspect of America covered by Peter Farb in Face of North America.)

35. Ickis, Marguerite, Nature in Recreation, A. S. Barnes and Company, New York, 1965, 206 pp. Suggestions of specific activities involving nature in recreational pursuits, including: camping, handicraft, games, dramatics, music, dancing, and aquatics. Of practical value to elementary school teachers.

36. LaChapelle, Edward R., Field Guide to Snow Crystals, University of Washington Press, Seattle, 1969, 101 pp. A field guide to snow crystals for the skier, nature lover and the serious student.

37. Leopold, Aldo, A Sand County Almanac and Sketches Here and There, Oxford University Press, New York, 1970, 226 pp. In part one the author describes his activities and thoughts during weekends at his Wisconsin farm; Parts II-III deal with development of the author's concern for the preservation of the out-of-doors and for the establishment of a "conservation ethic."

38. Longstreth, Morris T., Henry Thoreau: American Rebel, Dodd, Mead and Company, New York, 1963, 204 pp. A very readable biography of Henry Thoreau by a Quaker writer equally at home with man and nature, and keenly aware of the interrelationships of the two. A product of the Westtown School and Haverford College environmental awareness centers. Other books by Longstreth are Reading the Weather and The Adirondacks at Night.

39. Morgan, Ann Haven, Field Book of Ponds and Streams (A Putnam Nature Field Book), G. P. Putnam's Sons, New York, 1930, 448 pp. An excellent introduction and field guide to fresh water ecology.

40. Murie, Olaus, A Peterson Field Guide to Animal Tracks, Houghton Mifflin Company, Boston, 1960, 374 pp. This field guide covers every mammal for which tracks have been obtained in North America, Mexico, and Central America. Well illustrated, this book could be used by ecology students at any of our schools and colleges.

41. National Audubon Society, Audubon Nature Bulletins, The Society, New York, n.d., 70 Bulletins. The complete set of bulletins can be purchased for $12.00. Fourteen are good teaching aids; thirteen are on animals and how they live; nine are on insects and spiders; twelve are on plant identification; seven are on conservation; nine on ecology, and the remaining six on flannel boards. Highly recommended for elementary and middle school as well as adult ecology and conservation groups.

42. National Audubon Society, Audubon Study Programs, The Society, New York, n.d., five programs. Five attractive programs (Ecology, Birds, Trees, Plants and Mammals), in kit form, which stress the discovery approach. They are planned as units of study to spark the natural curiosity of young people about the world around them. (A Study Booklet - A Guide for Adult Leaders - Wall Chart in each kit.) All five kits for $10.00.

43. Ogburn, Charlton, Jr., The Forging of Our Continent, American Heritage Publishing Co., Inc., New York, 1968, 160 pp. A beautifully illustrated book giving a vivid geologic history of North America.

44. Osborn, Ben, Introduction to the Outdoors, Audubon Naturalist Society of the Central Atlantic States, Inc., Washington, D.C., 1965, 34 pp. This booklet is a collection of hints and references for people who want to become acquainted with the natural world outside the limits of urban streets and parks.

45. Osborn, Henry Fairfield, Cope: Master Naturalist, Princeton University Press, New Jersey, 1931, 740 pp. The life and letters of Edward Drinker Cope is a study of a Quaker pioneer in vertebrate palaeontology in America. Like Longstreth #38, Cope was also a Westtownian. Merely included here to document Friends Schools and Colleges long period of involvement in environmental research and education. Map of Cope's Travels in Fossil Regions of the United States and Mexico 1847-1897 might be of interest to retracing some of the steps of this early earth scientist.

46. Palmer, E. Laurence, Fieldbook of Natural History, McGraw-Hill Book Company, Inc., New York, 1949, 664 pp. Presents a brief description, line drawings, explanation of ecological importance and life cycle information about a wide range of topics in nature.

47. Peterson, Roger Tory, A Field Guide to the Birds (The Peterson Field Guide Series), Houghton Mifflin Company, Boston, 1947, 290 pp. The area covered by this guide is roughly, eastern and central North America from the Atlantic to the 100th meridian in the Great Plains.

48. Peterson, Roger Tory, A Field Guide to Western Birds (The Peterson Field Guide Series), Houghton Mifflin Company, Boston, 1941, 240 pp. The area covered by this guide is roughly, western United States from the Pacific through the Rockies to the western parts of the Great Plains.

49. Peterson, Roger Tory, and McKenny, Margaret, A Field Guide to Wildflowers, Houghton Mifflin Company, Boston, 1968, 420 pp. A visual approach to wildflowers arranged by color, form, and detail. The area covered by this guide is the northeastern and north-central states and adjacent Canada, roughly east of the 97th meridian.

50. Petrides, George A., A Peterson Field Guide to Trees and Shrubs, Houghton Mifflin Company, Boston, 1958, 431 pp. Gives the field marks of all trees, shrubs, and woody vines that grow wild in the northeastern and north-central U.S. and in southeastern and south-central Canada.

51. Platt, Rutherford, A Pocket Guide to Trees, Washington Square Press, Inc., New York, 1960, 256 pp. Covers the seven regions of tree discovery in the United States plus a few foreign-born trees. Clear writing makes it good reading and a good supplement to Brown #9, Reading the Woods and Petrides, #50 above.

52. Price, Betty, Adventuring in Nature, National Recreation Association, New York, 1963, 89 pp. Views nature study as an exciting, adventurous journey of discovery into the world of plants and animals, rocks and minerals, the weather and the sky. Contains a chart of seasonal activities: spring, summer, fall, winter, and anytime of year.

53. Robbins, Chandler S.; Bruun, Bertel, and Zim, Herbert S., Birds of North America, Golden Press, New York, 1966, 340 pp. An excellent guide to field identification; some feel it is better than #47 and #48.

54. Sanderson, Ivan T., How to Know the American Mammals, Mentor, New York, 1951, 164 pp. Not as good as #11.

55. Shalucha, Barbara, Laboratory Manual in Field Natural History, Indiana University, Bloomington, 1964, 249 pp. More practical than #46. Provides a sense of direction for introductory ecological field studies.

56. Shepard, Odell, editor, The Heart of Thoreau's Journals, Dover Publications, Inc., New York, 1961, 228 pp. A good companion for #38 and #65.

57. Sherburne, Frances, and Roth, Charles E., Natural History Day Camps, The Massachusetts Audubon Society, Lincoln, Mass., 1965, 43 pp. An excellent guide for establishing Natural History Day Camps as stepping stones to conservation. Friends Schools and Colleges might give some thought to this type of use of their campus.

58. Shomon, Joseph J., Manual of Outdoor Interpretation, National Audubon Society, New York, 1968, 104 pp. A multiple-author report on attempts to stimulate nature appreciation and develop an outdoor conscience in national park and forest users; in state, county and city park users; as well as persons at nature centers, on school and college lands, in caves and underwater areas, as well as in urban environments.

59. Sloane, Eric, Weather Book, Duel, Sloan and Pearce, New York, 1952, 90 pp. The diagrams and drawings in this book help clear up some weather concepts that are difficult to describe or understand with words alone. One of many introductory books on weather.

60. Swedrup, Ivan, Dogs in Color, M. Barrows and Company, Inc., New York, 1961, 149 pp. One of the best "field guides" to dog ecology, a valuable identification tool as well as containing much information on the relationship between dog and man. More than 146 breeds are shown and their origins traced.

61. Teale, Edwin Way, North with the Spring, Dodd, Mead and Company, New York, 1952, 366 pp. Earlham College graduate Edwin Way Teale shares his 17,000 mile naturalist journey north with the American spring with readers all over the world. Now available in paperback. Score one more environmentalist to the Quaker ecology movement.

62. Teale, Edwin Way, Autumn Across America, Dodd, Mead and Company, New York, 1956, 386 pp. A naturalist's record of a 20,000-mile journey through the American autumn. In both Teale's spring and fall journeys he passed through the regions in which the majority of our Friends Schools and Colleges are located; for this reason they may alert some of our schools to natural wonders in their own region as well as in other regions in our Friends Schools and Colleges environmental awareness system.

63, Tilden, Freeman, Interpreting Our Heritage, The University of North Carolina Press, Chapel Hill, 1967, 120 pp. Discusses the meaning and implication of interpretation as it is in our National Park System. Covers interpretation of our natural, historical, and cultural heritage.

64. Tilden, Freeman, National Parks: What They Mean to You and Me, Alfred A. Knopf, New York, 1968, 326 pp. Excellent reference, unfolding the purpose and meaning of our national parks.

65. Thoreau, Henry David, Walden, Mentor, New York, 1953, 221 pp. Life in the Woods or Walden is the record of Thoreau's famous experiment in essential living, a life bare in its creature comforts and shorn of superficialities, but rich in contemplation and thought and observation of nature. See #38 and #56.

66. van der Smissen, Betty, and Goering, Oswald, A Leader's Guide to Nature-Oriented Activities, The Iowa State University Press, Ames, Iowa, 1965, 210 pp. Teachers will find this one of the best sources available for a successful nature program. It tells how to develop the basic program and make use of community resources.

67. Vinal, William Gould, Nature Recreation, Dover Publications, Inc., New York, 1963, 310 pp. A classic in the field containing program ideas for the teacher and recreation leader.

68. Wallin, Harold, Interpretation: A Manual and Survey on Establishing a Naturalist Program, American Institute of Park Executives, Inc., Wheeling, West Virginia, 1963, 40 pp. All aspects of an environmental awareness program are considered. What it is; who should do the job; facilities (nature trails, exhibits, center building); and the program itself. An excellent guide for the ecologist in residence.

69. Watts, May Theilgaard, Reading the Landscape, The MacMillan Company, New York, 1968, 230 pp. Watt discusses various ecological relationships which can be found in 13 different habitats. By looking at what is around us, we can explain the past, understand the processes existing today, and on the basis of this information, predict the future. An absolute "must" for the high school and college ecology library. An extensive bibliography is at the end of each chapter.

70. Watts, May Theilgaard, Tree Finder: A Pocket Manual for Identification of Trees by Their Leaves, Nature Study Guild, Berkeley, California, 1963, 38 pp. A good tree key to use with #9, #50, and #51.

71. Watts, May Theilgaard, Flower Finder: A Guide to Identification of Spring Wild Flowers and Flower Families, Nature Study Guild, Berkeley, California, 1955, 60 pp. A wild flower key to use with #49.

72. Wildman, Edward E., This Week Out of Doors: A Nature Calendar, Livingston Publishing Company, Narberth, Pa., 1954, 202 pp. A classic which has a wealth of environmental awareness material for Delaware Valley Friends Schools and Colleges.

73. Wiley, Farida A., editor, John Burroughs' America, A Doubleday Anchor Book, New York, 1961, 293 pp. A classic which has a wealth of environmental awareness material for our Hudson River Valley Schools, particularly Oakwood.

74. Wiley, Farida A., Ferns of Northeastern United States, National Audubon Society, New York, 1948, 108 pp. Illustrations and descriptions of all known species in the New England and Middle Atlantic States. A pocket manual for the amateur with two aids for fern identification that are not included in other pocket manuals: A Key to Sterile Fronds and Drawings of Vascular Bundle Patterns.

75. Zim, Herbert S. and Baker, Robert H., Stars, Simon and Schuster, New York, 1951, 157 pp. A Golden Nature Guide to the constellations, sun, moon, planets, and other features of the heavens.

ENVIRONMENTAL EDUCATION
(Programs, Courses of Study and Lesson Plans)

1. Ambry, Edward J., and others, Evaluation for Environmental Education, The New Jersey Council for Environmental Education, Mountain Lakes, New Jersey, 1969, 63 pp. A systems analysis approach for self-evaluation.

2. American Camping Association, Conservation of the Camp Site, ACA, Bradford Woods, Martinsville, Indiana, 1960, 36 pp. Valuable as an aid to formulating your campus conservation plan.

3. Ashbaugh, Byron L., Planning A Nature Center (Information-Education Bulletin No. 2), National Audubon Society, New York, 1963, 87 pp. Highly recommended for schools considering establishing nature areas on or near their campus.

4. Ashbaugh, Byron L., and Holmes, Robert F., Trail Planning and Layout (Information-Education Bulletin No. 4), National Audubon Society, New York, 1965, 103 pp. Goes along with #3, 17, 56 and 57.

5. Association of American Geographers, Sources of Information and Materials: Maps and Aerial Photographs, The Association, Washington, D.C., 1970, 159 pp. An excellent guide of where to secure base maps necessary for most environmental studies, prepared by the committee on maps and aerial photographs of the High School Geography Project.

6. Baker, Douglas E., and Simons, Carl A., A Multidisciplinary Environmental Education Proposal for Secondary Schools, Drexel University, Philadelphia, 1970, 62 pp. mimeo. A one year high school course with suggestions for local environmental projects.

7. Bennett, Mrs. Eleanor B., Guidelines for Environmental Sensitivity, Pennsylvania Department of Public Instruction, Harrisburg, 1969, 15 pp. Defines environmental education as dealing with both human and natural resources and their relationship to each other- in other words with the total environment.

8. Bromfield, Louis, Malabar Farm, Ballantine Books, New York, 1970, 470 pp. An excellent introduction to a rural environment and life style.

9. Carlson, Reynold E., and others, Bradford Woods Handbook, Indiana University, Bloomington, Indiana, 1956, 59 pp. mimeo. A good example of the type of handbook of local flora, fauna, geology, and history for field campus users.

10. Carlson, Reynold E., and others, Outdoor Education Through School Camping, Indiana State Department of Public Instruction and Indiana State Board of Health, Indianapolis, 1958, 36 pp. Designed to serve as a guide for school personnel who plan to initiate similar programs.

11. Columbus Metropolitan Park Board, Leader's Handbook of Nature Interpretation and Outdoor Education, The Park Board, Columbus, Ohio, 1963, 200 pp. mimeo. A collection of more than thirty articles, papers, and outlines by various outdoor educators.

12. Coulanges, Fustel De, The Ancient City, Anchor Books, New York, 1955, 396 pp. For the student of the urban environment. A classic study of the religious and civil institutions of Greece and Rome.

13. Davidson, Harry R., and others, School Farm Guide, Battle Creek Public Schools, Battle Creek, Michigan, 1962, 40 pp.mimeo. An excellent guide written to help fifth and sixth grade teachers become sensitive to the learning potential at their school farm. (Westtown School, George School, and others take note.)

14. Davidson, Harry R., and others, A Camping We Will Go, Battle Creek Public Schools, Battle Creek, Michigan, 1965, 108 pp. mimeo. An excellent school camping activity guide for 5th and 6th grade teachers.

15. The Editors of Fortune, The Exploding Metropolis, Anchor Books, New York, 1958, 177 pp. A classic on what is happening to the environment surrounding our cities.

16. Eldredge, H. Wentworth, editor, Taming Megalopolis, Anchor Books, New York, 1967, 1166 pp. (two volumes). Taming Megalopolis brings together the ideas of more than sixty experts from many disciplines to delineate what the city now is, what it might be, and how that urbanized world may be managed.

17. Forest Service, Developing the Self-Guiding Trail in the National Forest (Miscellaneous Publication 968), U.S. Dept. of Agriculture, Washington, D.C., 1964, 18 pp. Complements #4.

18. Hafner, Everett M.; Fowler, John M., and Williams, Curtis A., Environmental Education 1970, Scientists' Institute for Public Information, New York, 1970, 28 pp. Faculty and students describe a variety of needs, approaches and experiences in undergraduate environmental education. Lists courses for a number of colleges and universities-but none from Friends Schools or Colleges were mentioned.

19. Henderson, Ernest L., The World Around Them, Conservation and Environmental Studies Center (CESC), Inc., Whitesbog, N.J., 1969, 40 pp. An instruction plan for upper elementary school students for environmental education in the urban environment.

20. High School Geography Project, Geography in an Urban Age, The Association of American Geographers, Washington, D.C., 1970, six units. A one-year geography course for students in grades 9 through 12. The six units in the course deal with (1) cities, (2) manufacturing and agriculture, (3) cultural processes, (4) political processes, (5) habitat and resources and (6) Japan.

    Additional information and sample materials are available at the Macmillan Company nearest you. Penn Charter and Baltimore Friends are two schools that the consultant knows of that have been experimenting with this approach to environmental awareness.

21. Hiros, John E., Angling for an Unknown Dimension, CESC, Inc., Whitesbog, N.J., 1969, 10 pp. An environmental education instruction plan for upper elementary and junior high math students.

22. Hiros, John E., Inviting Involvement with History, CESC, Inc., Whitesbog, N.J., 1969, 16 pp. An environmental education instruction plan for upper elementary and junior high social studies students.

23. Horn, Kenneth W., Proposed Plan for a Fifth Grade Outdoor Education Resident Facility for the Denver Public Schools, Denver Public Schools, Denver, Colorado, 1970, 105 pp. mimeo. This material was sent to John Emerson by Royce D. Forsyth, supervisor of the Balarat Center for Environmental Studies, during the time the Friends Rural Education Center Committee was researching its proposal for the Executive Committee of the Friends Council on Education. It contains many useful details for those seriously interested in resident environmental education programs for Friends Schools and Colleges.

24. Jackson, John Y., Land Use-Concern-Challenge-Commitment, CESC, Inc., Whitesbog, N.J., 1969, 11 pp. An environmental education instruction plan for junior high and secondary students.

25. Larrick, Nancy, selector, On City Streets: An Anthology of Poetry, Bantam Books, New York, 1968, 158 pp. Strongly recommended for your urban environmental awareness program.

26. Leinward, Gerald, editor, The City as a Community, Washington Square Press, New York, 1970, 192 pp. This book and the next three in the bibliography are designed to become text material for urban schools. Known as "The Problems of American Society Series," these books probe some of the most crucial dilemmas of our time.

27. Leinward, Gerald, editor, The Traffic Jam. Washington Square Press, New York, 1970, 159 pp. See #26.

28. Leinward, Gerald, editor, Air and Water Pollution, Washington Square Press, New York, 1969, 160 pp. See #26.

29. Leinward, Gerald, editor, Drugs: Mind-Expanding Experience or Ticket to Death?, Washington Square Press, New York, 1970, 190 pp. See #26.

30. Mason, Fred J., Adventures in a Hydrosphere: Physical Study of Water Resources, CESC, Inc., Whitesbog, N.J., 1970, 15 pp. An environmental education instruction plan for the secondary level.

31. Mason, Fred J., Founding a New Settlement: Survival Skills, CESC, Inc., Whitesbog, N.J., 1970, 14 pp. An excellent environmental education plan for upper elementary and junior high students.

32. Mason, Fred J., Tuning Up the Five Senses, CESC, Inc., Whitesbog, N.J., 1969, 20 pp. An environmental education plan designed to help develop environmental awareness in upper elementary and junior high grades.

33. Morton, Duryea, Wildlife Sanctuaries: The Improvement and Use of Local Areas for Birds and Other Wild Animals, Audubon Center of Greenwich, Connecticut, n.d., 24 pp. Like #3 this will help you plan and manage nature areas on or near your campus.

34. Mumford, Lewis, The City in History, Harcourt, Brace and World, Inc., New York, 1961, 657 pp. This book and others by Mumford have helped the consultant and others develop an awareness and appreciation of urban environments.

35. Nathans, Alan A., The Handbook of Camp Maintenance, Association Press, New York, 1959, 239 pp. An all-in-one guide and check list to basic environmental maintenance programs and procedures for camp equipment, buildings and grounds. Easily adapted to campus maintenance.

36. National Audubon Society, A Place to Live, NAS, New York, 1970, 64 pp. A new urban ecology program which covers the basic ecology concepts as found in any urban environment. It is written simply enough to be read independently by most 4th and 5th graders. A 52-page Teacher's Manual offers ample supplemental material.

37. National Commission on YMCA Camp Layouts, Buildings, and Facilities, Developing Camp Sites and Facilities, Association Press, New York, 1965, 63 pp. Contains many sound suggestions of how to prepare rural and wilderness areas for heavy use by campers and students. The Friends Rural Education Center Committee should find this helpful.

38. National Education Association, Man and His Environment, N.E.A., Washington, D.C., 1970, 56 pp. An excellent introduction to using environmental study areas.

39. National Park Service, National Environmental Study Area... A Guide, Department of Interior, U.S. Government Printing Office, 1970, 103 pp. Gives steps for setting up an environmental study area.

40. National Wildlife Federation, The U.S. Public Considers Its Environment, The Gallup Organization, Inc., Princeton, New Jersey, 1969, 31 pp. mimeo. Gives an idea of how the American people feel about their environment.

41. New Jersey State Council for Environmental Education and New Jersey Outdoor Education Association, New Jersey Environmental and Outdoor Education Projects, N.J. State Department of Education, Trenton, New Jersey, 1969, 94 pp. The format of this report might be a good way to summarize the environmental awareness projects of the schools and colleges within the Friends Council's sphere of influence.

42. Nowlis, Helen H., Drugs on the College Campus, Anchor Books, 1969, 144 pp. One of the better books on this environmental problem.

43. Patterson, Frank G., Exploitation of the New Jersey Pine Barrens- Past, Present and Future, CESC, Inc., Whitesbog, N.J., 1969, 15 pp. An excellent introduction to a little known area which is quickly traversed by many of our shorebound Friends Schools vacationing faculty and students.

44. Patterson, Frank G., Forest- A Dichotomy Between Dollars and Dreams, CESC, Inc., Whitesbog, N.J., 1969, 5 pp. An environmental education instruction plan for upper elementary and junior high students.

45. Patterson, Frank G., North, East, South and West, CESC, Inc., Whitesbog, N.J., 1969, 15 pp. A map and compass environmental education instruction plan for upper elementary and junior high students.

46. Pennridge School District, Bucks County Park Board, and Bucks County Public Schools, A Pilot Project in Outdoor Education at Lake Towhee, Bucks County Administrative Building, Doylestown, Penna., 1967, 20 pp. mimeo. The study of ecology and natural sciences in Bucks County- this type of program could be duplicated by any of our Friends Schools and Colleges.

47. Raffo, John, Water- The Waste of Plenty, CESC, Inc., Whitesbog, N.J., 1969, 20 pp. An environmental education instruction plan for upper elementary and junior high students.

48. Raimist, Roger J., Laboratory Experiences in Marine Biology for Upper Elementary and Secondary School Grades, CESC, Inc., Whitesbog, N.J., 1967, 26 pp. Designed to develop within the student an ecological problem-solving approach to our marine environment.

49. Raimist, Roger J., Marine Science Source Book, CESC, Inc., Whitesbog, N.J., 1969, 20 pp. A source book for marine science K-12.

50. Raimist, Roger J., and the New Jersey Marine Science Consortium, consultants, The Marine Sciences K-12, CESC, Inc., 1969, 67 pp. A feasibility study on the place of marine sciences in the public school curriculum of New Jersey K-12.

51. Schoeck, Lois M., Everyone Talks About the Weather, CESC, Inc., Whitesbog, N.J., 1969, 14 pp. An environmental education instruction plan for primary grade students.

52. Schoeck, Lois M., Is Ther a Better Way?, CESC, Inc., Whitesbog, N.J., 1970, 16 pp. A portfolio of conservation posters and study questions designed to assist the teacher in furthering the development of environmental education in the schools.

53. Schoenfeld, Clay, Cabins, Conservation, and Fun, A. S. Barnes and Company, New York, 1968, 337 pp. Persons interested in environmental awareness through rural and wilderness living experience will find this book helpful in selecting the desired environment.

54. Schoenfeld, Clay, editor, Environmental Education, Dembar Educational Research Services, Inc., Post Office Box 1605, Madison, Wisconsin 53071. An excellent new conservation journal. Published four times per year; $7.50 is the subscription price.

55. Schoenfeld, Clay, editor, Outlines of Environmental Education, Dembar Education Research Services, Inc., Madison, Wsiconsin, 1971, 256 pp. Should help clear up some of the confusion caused by the environmental crisis. It is one of the first reviews of a new movement aimed at ecological awareness, attitude, and action.

56. Shomon, Joseph J., A Nature Center for Your Community (Information-Education Bulletin No. 1), National Audubon Society, New York, 1963, 40 pp. Use with #3, 4, 17, and 57.

57. Shomon, Joseph J., and others, Wildlife Habitat Improvement, National Audubon Society, New York, 1966, 96 pp. See #56.

58. Stapp, William B., "Environmental Encounters," Environmental Education, 2:35-41, Fall 1970. (See item #72 in Part I of Bibliography.)

59. Steffek, Edwin F., Gardening the Easy Way, Pyramid Books, New York, 1968, 192 pp. A practical approach to a beginning gardener's problems.

60. Stratton, Larry B., and others, Organizational Plan for Curriculum Development, Southeastern Pennsylvania Outdoor Education Center, Media, Pa., n.d., 18 pp. mimeo. The main purpose of this center is to make outdoor education an integral part of the curriculum of every school in Chester and Delaware Counties. Friends Schools and Colleges in these counties should avail themselves of the services of this center.

61. Train, Russel E., Chairman, "Environmental Education," part XII, pp. 221-229, in Environmental Quality: The First Annual Report of the Council on Environmental Quality, U.S. Government Printing Office, Washington, D.C., 1970. Stresses the importance of environmental learning experience K-12.

62. Tunnard, Christopher, and Reed, Henry Hope, American Skyline, Mentor Books, New York, 1956, 224 pp. Traces the growth and form of American cities and towns - a good book for your urban environment awareness program. Use with #12, 15, 16, 19, 20, 25, 26, 27, 28, 29, 34, 36, 38, 39, and 67.

63. U.S. Department of Agriculture, Rural Recreation Enterprise for Profit (Agricultural Information Bulletin No. 277), U.S. Government Printing Office, Washington, D.C., 1963, 44 pp. Contains much valuable information that may help the Friends Rural Education Center Committee finance its rural environmental awareness programs.

64. Vivian, V. Eugene, Guidebook for Resident Environmental Education Programs, CESC, Inc., Whitesbog, N.J., 1969, 64 pp. This booklet was devised to help develop a resident environmental education program. Friends considering such programs would be wise to consult it.

65. Vivian, V. Eugene, Teacher's Workshop Handbook for Resident Programs, CESC, Inc., Whitesbog, N.J., 1969, 50 pp. Provides information and guidelines for resident environmental education programs.

66. Vivian, V. Eugene, Manual for College Participants in Environmental Education Programs, CESC, Inc., Whitesbog, N.J., 1969, 25 pp. Describes in some detail the program and purpose of the Conservation and Environmental Science Center at Whitesbog, New Jersey. (In many ways this handbook is similar in purpose to #9, Carlson's Bradford Woods Handbook. The Friends Rural Education Centers will need such handbooks.)

67. Warren, Roland, Study Your Community, The Free Press, New York, 1965, 385 pp. This is a manual for layman and student interested in finding out just what their community is, what it does, what it has neglected to do, and what its facilities and assets are for meeting new needs or solving new problems.

68. Wentzel, Fred D., editor, Site Selection and Development: Camps - Conferences - Retreats, United Church Press, Philadelphia, 1965, 174 pp. This is by far the most comprehensive and authoritative work in this field.

Prepared for the Friends Council on Education by Fred C. Swan as a part of his responsibilities as Consultant on Environmental Awareness.

Additional copies of Bibliography are available from:

Friends Council on Education
1515 Cherry Street
Philadelphia, Pennsylvania 19102

ENVIRONMENTAL AWARENESS IN FRIENDS SCHOOLS AND COLLEGES

Part Three: A Selected Bibliography of Environmental Education Literature

ENVIRONMENTAL RECREATION
(Outward Bound Types of Activities)

1. The Adirondack Mountain Club, Inc., Guide to Adirondack Trails, ADK, Gariels, Franklin County, New York, 1962, 300 pp. plus maps. A guide to the high peak region and the Northville-Placid Trail.

2. American Camping Association, Camping is Education, ACA, Martinsville, Indiana, 1960, 30 pp. Makes clear camping's special contribution to education.

3. American Camping Association, Sing!, ACA, Martinsville, Indiana, n.d., 96 pp. A songbook for camping- small enough to carry in your pack.

4. The American National Red Cross, Swimming and Water Safety Textbook, The Red Cross, Washington, D.C., 1968, 142 pp. Contains survival skills and knowledge that should be acquired as early as possible by all Friends School students and faculty.

5. American Youth Hostels, Inc., 1970-1971 Hostel Guide and Handbook, AYH, New York, 1970, 140 pp. The best guide available on American Youth Hostels. All Friends Schools should give serious thought to membership in this national and international outward bound type of organization.

6. Angier, Bradford, Home in Your Pack: The Modern Handbook of Backpacking, Stackpole Books, Harrisburg, Penna., 1965, 192 pp. Excellent for East Coast and West Coast back packing enthusiasts. Gives information on the Appalachian Trail (Maine to Georgia) and the Pacific Crest Trail (Canada to Mexico).

7. Angier, Bradford, Skills for Taming the Wilds: A Handbook of Woodcraft Wisdom, Stackpole Books, Harrisburg, Penna., 1967, 280 pp. Outward bound outdoor enthusiasts may learn a few things from this book about wilderness living.

8. Angier, Bradford, How to Stay Alive in the Woods, Collier Books, New York, 1970, 285 pp. A good companion for Euel Gibbons books #35, 36, 37.

9. Appalachian Mountain Club, The AMC White Mountain Guide, AMC, Boston, 1969, 526 pp. The Meeting School and others will find this a useful guide to the trails in the Mountains of New Hampshire.

10. The Appalachian Trail Conference, Suggestions for Appalachian Trail Users (Publication No. 15), The AT Conference, Washington, D.C., 1962, 35 pp. Useful to Friends Schools and Colleges from Friendsville Academy (Tennessee) to Oak Grove School (Maine).

11. Asa, Warren, American Youth Hostels' North American Bicycle Atlas, C. S. Hammond and Company, New York, 1969, 127 pp. All Friends Schools and Colleges will find this overview of North America's bicycling environment helpful in developing bike trails radiating out from their campuses into the local environment and perhaps linking our schools together.

12. Bale, Robert O., Outdoor Living, Burgess Publishing Co., Minneapolis, 1961, 191 pp. Excellent. Has a chapter on survival camping as well as a progression of outdoor living skills to add enjoyment and satisfaction to living comfortably in the out-of-doors.

13. Barcam Publishing Company, editor, Rand McNally Guide to Campgrounds, Rand McNally and Company, New York, 1969, 312 pp. A family directory of campgrounds throughout the United States and Canada- useful to students' and faculty families.

14. Beattie, Bob, and Casewit, Curtis, Bob Beattie's Learn to Ski, Bantam Books, New York, 1967, 148 pp. Gives a good overview of skiing and ski technique.

15. Best, Dick and Beth, editors, Intercollegiate Outing Club Association New Song Fest, Crown Publishers, Inc., New York, 1961, 160 pp. A lively outing club songbook. See also #3

16. Blackshaw, Alan, Mountaineering: From Hill Walking to Alpine Climbing, Penguin Books, Inc., Baltimore, Maryland, 1968, 524 pp. Full of mountaineering skills plus a guide to climbing in Britain and Alpine Mountaineering.

17. Brady, Michael, Nordic Touring and Cross-Country Skiing, Oslo, Norway, 1966, 70 pp. A fine introduction to cross-country skiing; see also #24.

18. Brightbill, Charles K., Educating for Leisure-Centered Living, Stackpole Books, Harrisburg, 1966, 232 pp. One of the best introductions to total environmental recreation and how to prepare for it.

19. Brower, David, editor, The Sierra Club Wilderness Handbook, Ballantine Books, New York, 1968, 317 pp. Easterners can learn much from this fine wilderness handbook.

20. Brower, David, editor, The Sierra Club Manual of Ski Mountaineering, Ballantine Books, New York, 1969, 236 pp. Argenta Friends School (B.C.) and George Fox College (Oregon) should have copy of this.

21. The Buck Ridge Ski Club, Basic River Canoeing, Swarthmore, Pa., 1968, 70 pp. An excellent introduction to river canoeing techniques.

22. Burmeister, Walter, Appalachian Water, The Canoe Cruisers Association of Washington, D.C., 1962, 2 volumes (Out of print). The best and most detailed canoe guide book to streams along the eastern seaboard.

23. Bureau of Outdoor Recreation, Trails for America, U.S. Department of the Interior, Washington, D.C., 1966, 155 pp. Colorful maps of the proposed nationwide trail system.

24. Caldwell, Johnny, The Cross-Country Ski Book, The Stephen Greene Press, Brattleboro, Vt., 1964, 80 pp. See #17.

25. Cawley, James and Margaret, Exploring the Little Rivers of New Jersey, The Rutgers University Press, New Brunswick, New Jersey, 1961, 169 pp. All New Jersey, Pennsylvania, and Delaware Friends Schools and Colleges should be familiar with this Canoe guide.

26. Cooper, Kenneth H., The New Aerobics, Bantam Books, New York, 1970, 191 pp. A physical fitness manual for all ages and both sexes- one of many exercise programs that should be prerequisite to any strenuous environmental recreation activity.

27. Cooperative Recreation Services, Inc., Tent and Trail Songs, The Coop, Delaware, Ohio, 1964, 80 pp. Another pack-size camping songbook - see #3 and #15.

28. Cunningham, Gerry, How to Keep Warm, Colorado Outdoor Sports Corp., Denver, Colorado, 1967, 15 pp. This pamphlet plus Wilderness Trips You Can Enjoy and How to Enjoy Backpacking by the same author will make your wilderness outings safer and more enjoyable.

29. Dana, Samuel T., Education and Outdoor Recreation, Bureau of Outdoor Recreation, Washington, D.C., 1968, 47 pp. Stresses the role of the Nation's schools and colleges in preparing their students to enjoy and properly manage our outdoor recreation resources.

30. Delaware River Basin Commission, The Delaware River and Outdoor Recreation, The Commission, Trenton, New Jersey, 1966. Ten maps covering the Delaware River from Hale Eddy, N.Y. to Trenton, N.J. Gives the rapids, pools, riffles, and streamflow characteristics in addition to the outdoor recreation areas and river access.

31. Dunne, Desmond, Yoga Made Easy, Award Books, New York, 1969, 240 pp. If you don't like The New Aerobics, #26, you might try this exercise program.

32. Evans, Robert Jay, Fundamentals of Kayaking, The Ledyard Canoe Club, Dartmouth College, Hanover, N.H., 1964, 37 pp. Bored by still water? Try a little white water sport.

33. Feleppa, Carolyn, editor, The Student Traveler Abroad: Work, Study, Travel, Grosset and Dunlap, New York, 1969, 176 pp. A good companion for #43 or vis-à-vis.

34. Folsom, Franklin, Exploring American Caves: Their History, Geology, Lore, and Location, Collier Books, New York, 1962, 307 pp. A spelunker's guide to the caves near you.

35. Gibbons, Euell, Stalking the Wild Asparagus: Field Edition, David McKay Company, Inc., New York, 1962, 303 pp. Use #35-37 with Bale's #12, Outdoor Living.

36. Gibbons, Euell, Stalking the Blue-Eyed Scallop: Field Edition, David McKay Company, Inc., New York, 1964, 332 pp.

37. Gibbons, Euell, Stalking the Healthful Herbs, David McKay Company, Inc., New York, 1966, 295 pp.

38. Greenberg, Al, editor, Skiing Magazines 1971 Ski Area Guide, Ziff-Davis Publishing Company, New York, 1970, 138 pp. Shows the major North American skiing areas and will help your ski clubs plan their trips to slopes nearest you.

39. Greenhood, David, Mapping, The University of Chicago Press, Chicago, 1965, 289 pp. An excellent introduction to map reading and map making- both of which will enable you to enrich your environmental recreation experiences and to share your adventures with others.

40. Hammett, Catherine, Your Own Book of Campcraft, Pocket Books, Inc., New York, 1966, 197 pp. Prepared under the auspices of the American Camping Association, this is one of the best introductions to camping and camping skills.

41. Jensen, Clayne R., Outdoor Recreation in America, Burgess Publishing Company, Minneapolis, 1970, 285 pp. A college text that will be of great interest to the layman. Has a fine section on the total recreation experience as well as a chapter on the struggle for a pleasant environment.

42. Johnson, C. Walton, The Unique Mission of the Summer Camp, Weaverville, N.C., 1960, 24 pp. A profound philosophical observation on the environmental influence of summer camping on individuals.

43. Klinger, Herb and Judy, Knapsacking Abroad, Stackpole Books, Harrisburg, Penna., 1969, 94 pp. A real money saver for our world traveling human ecologists. See #33 if you're too "soft" for back packing; however, Klinger's book should help you make your suitcase lighter.

44. Judd, Jane; Hughes, Barbara J., and the National Park Service, Walking and Hiking Trails of Yosemite Valley, The Jays, Oakhurst, California, n.d., 4 pp. A key to environmental awareness for those anticipating a visit to this National Park.

45. Keystone Trails Association, Pennsylvania Hiking Trails, KTA, Concordville, Penna., 1968, 49 pp. Contains an index of maps, trail data, and list of hiking clubs that maintain trails in Pennsylvania.

46. Keystone Trails Association, Guide to the Appalachian Trail in Pennsylvania from the Maryland Line to the Delaware Water Gap, KTA, Concordville, Pa., 1968, 113 pp. plus maps.
Other trail guides are available for the entire Appalachian Trail.

47. Kramer, Franz, Ski the New Way, Sterling Publishing Co., Inc., New York, 1964, 127 pp. See #14.

48. Lynn, Gordon, The Golden Book of Camping and Camp Crafts, Golden Press, New York, 1962, 112 pp. Advice given on light-weight and heavy-weight camping.

49. MacFall, Russell P., Family Fun Outdoors, The Thomas Y. Crowell Company, New York, 1965, 212 pp. See #13.

50. Malo, John, Malo's Complete Guide to Canoeing and Canoe-Camping. Collier Books, New York, 1970, 278 pp. Goes well with #21 and #22.

51. Mendenhall, Ruth Dyar, Backpack Cookery, La Siesta Press, Glendale, California, 1966, 40 pp.

52. Mendenhall, Ruth Dyar, Backpack Techniques, La Siesta Press, Glendale, California, 1967, 36 pp.

53. Mendenhall, Ruth and John, Introduction to Rock and Mountain Climbing, Stackpole Books, Harrisburg, 1969, 192 pp. Your outward bound enthusiasts are probably already familiar with this fine introduction to mountain climbing. See also Blackshaw #16.

54. Miracle, Leonard, and Decker, Maurice H., Complete Book of Camping (Outdoor Life), Harper and Brothers, New York, 1961, 594 pp. More advanced than #40.

55. National Recreation and Park Association, A Guide to Books on Recreation: Fourteenth Annual Edition- 1971, Washington, D.C., 1970, 54 pp. This non-governmental publication provides the best guide to environmental recreation books known to the consultant. (Available from the National Recreation and Park Association Bookstore, 1700 Pennsylvania Ave., N.W., Washington, D.C. 20006, for $1.00.)

56. Nesbitt, Paul H.; Pond, Alonzo W., and Allen, William H., The Survival Book, Funk and Wagnalls, New York, 1959, 338 pp. Good reading for our air traveling world ecologists- armchair or otherwise.

57. Peterson, Gunnar A., and Edgren, Harry D., The Book of Outdoor Winter Activities, Association Press, New York, 1962, 211 pp. Excellent- field tested by the consultant at Scattergood School (Iowa) during the winters of '62, '63, and '64.

58. Ratliff, Donald E., Map, Compass and Campfire, Binfords and Mort, Portland, Oregon, 1964, 63 pp. A very practical introduction to orienteering.

59. Royce, Patrick M., Royce's Sailing Illustrated, Fashion Press, Inc., New York, 1968, 289 pp. Superb graphics and text.

60. Shosteck, Robert, Potomac Trail Book, Potomac Books, Inc., Washington, D.C., 1968, 167 pp. Sidwell, Sandy Spring, and Baltimore Friends will find this most helpful in formulating their local outward bound programs.

61. Sloan, Eugene A., The Complete Book of Bicycling, Trident Press, New York, 1970, 342 pp. Excellent. Also see #11.

62. U.S. Department of Agriculture, Outdoors USA: The Yearbook of Agriculture 1967, Government Printing Office, 1967, 408 pp. Full of valuable environmental recreation information and suggestions on how to enjoy rural and wild America without destroying it.

63. U.S. Department of Health, Education, and Welfare, Office of Education, Recreation Program Leadership: A Two-Year Post High School Curriculum, U.S. Government Printing Office, Washington, D.C., 1969, 87 pp. All Friends Schools Health, Physical Education and Recreation Departments or teachers should find this curriculum guide helpful in improving the school recreation program as well as developing recreation leadership skills in their students.

64. Urban, John T., A White Water Handbook for Canoe and Kayak, Appalachian Mountain Club, Boston, Mass., 1965, 76 pp. See #21, 22, and 50

65. Wallace, Bill, A Golden Handbook of Sailing, Golden Press, New York, 1963, 159 pp. A guide to handling, equipping, maintaining and buying the small sailboat. See #59.

66. Webb, Kenneth B. and Susan H., Summer Magic, Association Press, New York, 1953, 159 pp. Friends Schools should try to capture some of Webb's summer camping magic in your fall, winter, and spring school camping programs.

67. Webb, Kenneth B., editor, Light from a Thousand Campfires, Burgess Publishing Company, Minneapolis, 1965, 384 pp. Should help you immensely with your school camping program and implementing above suggestion (#66).

68. Weldon, Robert K., and Potts, Merlin, A Guide to the Trails of Mount Rainier, Natural History Association, Longmire, Washington, 1966, 50 pp. An environmental awareness aid like #44.

69. Wells, George S., The Handbook of Wilderness Travel, Colorado Outdoor Sports Corp., Denver, Colorado, 1968, 306 pp. Contains a guide to the wilderness trails in every state- should get you and your students to where the action isn't. One of the best books on this list.

Prepared for the Friends Council on Education by Fred C. Swan
as a part of his responsibilities as Consultant on
Environmental Awareness.

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